

MCL101A...MCL101C

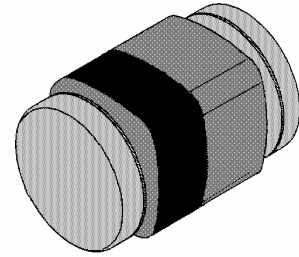
SILICON SCHOTTKY BARRIER DIODES

for general purpose applications

LS-31

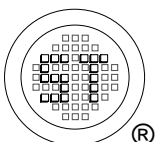
Features

- Fits onto SOD 323 / SOT 23 footprints
- Micro Melf package



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

		Symbol	Value	Unit
Peak Reverse Voltage	MCL101A	V_{RRM}	60	V
	MCL101B	V_{RRM}	50	V
	MCL101C	V_{RRM}	40	V
Power Dissipation at $T_{amb} = 25^\circ\text{C}$		P_{tot}	400	mW
Max. Single Cycle Surge 10 s Squarewave		I_{FSM}	2	A
Junction Temperature		T_j	200	$^\circ\text{C}$
Storage Temperature Range		T_s	- 55 to + 200	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



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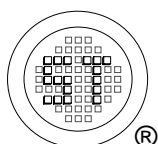
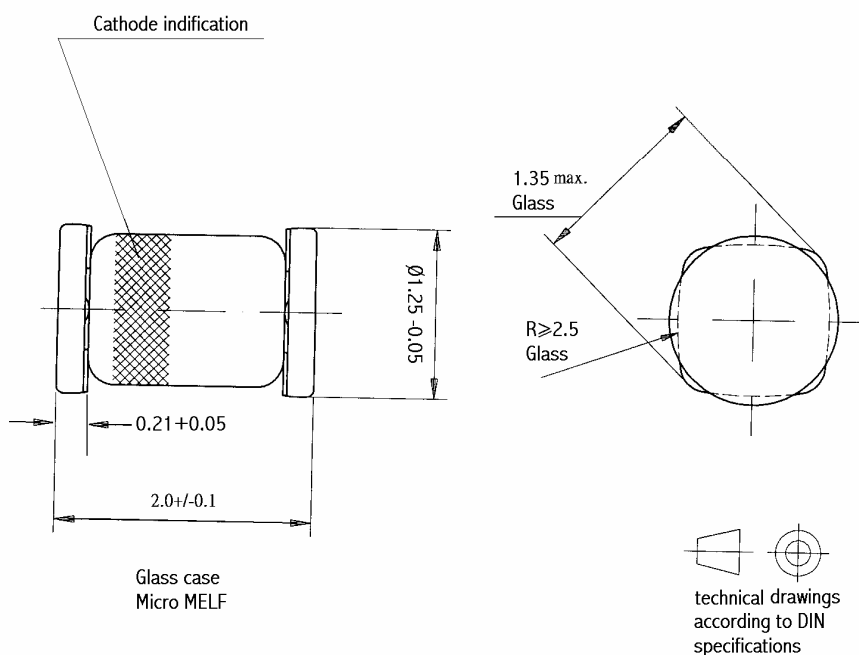
Dated : 20/08/2002

MCL101A...MCL101C

Characteristics at $T_{amb} = 25^{\circ}C$

		Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10 \mu A$	MCL101A	$V_{(BR)R}$	60	-	-	V
	MCL101B	$V_{(BR)R}$	50	-	-	V
	MCL101C	$V_{(BR)R}$	40	-	-	V
Leakage Current at $V_R = 50 V$ at $V_R = 40 V$ at $V_R = 30 V$	MCL101A	I_R	-	-	200	nA
	MCL101B	I_R	-	-	200	nA
	MCL101C	I_R	-	-	200	nA
Forward Voltage Drop at $I_F = 1 mA$ at $I_F = 15 mA$	MCL101A	V_F	-	-	0.41	V
	MCL101B	V_F	-	-	0.4	V
	MCL101C	V_F	-	-	0.39	V
	MCL101A	V_F	-	-	1	V
	MCL101B	V_F	-	-	0.95	V
	MCL101C	V_F	-	-	0.9	V
Junction Capacitance at $V_R = 0 V, f = 1 MHz$	MCL101A	C_{tot}	-	-	2	pF
	MCL101B	C_{tot}	-	-	2.1	pF
	MCL101C	C_{tot}	-	-	2.2	pF
Reverse Recovery Time at $I_F = I_R = 5 mA$, recover to $0.1 I_R$		t_{rr}	-	-	1	ns

Dimensions in mm



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